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- B1*
21. (Amended) An integrated circuit having at least one trench capacitor, said trench capacitor comprising:
- 3 a substrate;
- 4 an opening in said substrate, said opening having vertical sides, said vertical sides
- 5 including a plurality of lateral openings, wherein said lateral openings comprise rectangular
- 6 openings in cross-section;
- 7 an insulator lining said opening; and
- 8 a conductor filling said opening.

/
Please cancel claims 22-24 without prejudice or disclaimer.

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Please add the following new claims:

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27. An integrated circuit structure comprising:
- 2 a substrate;
- 3 an opening in said substrate, said opening having vertical sides, said vertical sides
- 4 including a plurality of lateral openings, wherein said lateral openings comprise V-shaped
- 5 openings in cross-section; and
- 6 a conductor filling said opening.

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cont
1 28. The integrated circuit in claim 27, wherein said lateral openings increase a surface area of
2 said structure.

1 29. The integrated circuit in claim 27, wherein said lateral openings increase a capacitance of
2 said structure.

1 30. An integrated circuit structure comprising:
2 a substrate;
3 an opening in said substrate, said opening comprising a first rectangular portion and a
4 second rectangular portion, wherein said second rectangular portion has larger dimensions than
5 said first rectangular portion; and
6 a conductor filling said opening.

1 31. The integrated circuit in claim 30, wherein said second rectangular portion is deeper in
2 said opening than said first rectangular portion.

1 32. The integrated circuit in claim 30, wherein said first rectangular portion is deeper in said
2 opening than said second rectangular portion.

1 33. The integrated circuit in claim 30, wherein said lateral openings increase a surface area of
2 said trench capacitor.

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Claim

34. The integrated circuit in claim 30, wherein said lateral openings increase a capacitance of said structure.

1 35. An integrated circuit structure comprising:

2 a substrate;

3 an opening in said substrate, said opening comprising a first rectangular portion, a second
4 rectangular portion, and a third rectangular portion, wherein said second rectangular portion has
5 larger dimensions than said first rectangular portion and said third rectangular portion; and
6 a conductor filling said opening.

1 36. The integrated circuit in claim 35, wherein said second rectangular portion is between
2 said first rectangular portion and said third rectangular portion.

1 37. The integrated circuit in claim 35, wherein said first rectangular portion and said third
2 rectangular portion have substantially similar dimensions.

1 38. The integrated circuit in claim 35, wherein said lateral openings increase a surface area of
2 said structure.